Lize 187

DAILY

DATE: January 26, 1987

FIELD

TIME: 9:30 a.m. to 5:00 p.m.

REPORT

PLACE: Cerro Copper

Triangular Parcel

WEATHER: Clear, Sunny, 20s

PROJECT:

JOB 10224A

CERRO COPPER

IEPA RI/FS OVERSIGHT

DISTRIBUTION:

S. Silverstein, Cerro (2 copies

LJO/JBC/ED 10224A-1.3

PERSONNEL ON SITE:

<u>NAME</u>	AFFILIATION	
Dave Guyan	Sverdrup	7.5
Dan Sewall	Ecology & Environment (E&E)	7.5
Tim Maley	Ecology & Environment (E&E)	7.5
Ron Bock	Ecology & Environment (E&E)	7.5
Jerry Hammon	Fox Drilling	7.5
Robbie Cracky	Fox Drilling	7.5
Henry Coliman	Drillers Union Official	7.5

FIELD WORK SUMMARY:

- 1. Dave Guyan arrived at E&E's metro field office at 9:30 a.m. Dan Sewall provided a brief description of the work E&E will be performing on Cerro property on this day.
- 2. Dan noted that E&E will be installing two monitoring wells to a depth of 25.0' on the triangular parcel of land south of New Queeny Avenue. The wells will have 5' stainless steel screens and 20.0' stainless steel risers. Samples will be collected by means of a split spoon sampler to a depth of 25.0'.
- 3. The drill crew steam cleaned the augers before drilling began.
- 4. The drill crew was dressed in Level C protective clothing during the drilling and sampling. They began by collecting a split spoon sample from 0-1.5' depth at Well Location G3/EE-11 (see Attachment A). Dan Sewall checked the sample with an HNU (brand name) photoionization detector. Tim Maley used a stainless steel spoon to collect a sample in a 1-quart glass jar.
- 5. The drill crew augered and collected 2.5' split spoon samples to a depth of 25'. Henry Coliman (Union Official) decontaminated (deconned) the split spoon sampler after each use. This was accomplished with a wash of hexane and acetone and a double rinse.

- 6. The sampling was completed by 12:00 p.m. and the drill crew began installing a stainless steel monitoring well. The screen was placed from 18.0' to 23.0' and stainless steel risers were placed from the screen to 3' above the ground surface. Sand was placed around the well to a depth of 15.0', a bentonite seal was placed to a depth of 13.0', and cement grout was placed to the surface.
- 7. Dave Guyan went to the E&E field office to watch Ron Bock screen the samples collected from Well G3/EE-11 using an organic vapor analyzer (OVA). The samples from 0' to 1.5' and 2.5' to 4.0' were combined and mixed in a stainless steel mixing bowl. The combined sample was placed in a glass flask and a double prong stopper was inserted. The sample was screened at room temperature and then heated on a hot plate. OVA readings were taken at 1, 3, and 5 minutes and recorded in a log book. The same procedure was used for each set of consecutive samples. During the screening, each stainless steel mixing spoon was expended after use on each sample set. Glass jars and mixing bowls were deconned using a double wash of cleaning solution, a double rinse in water, and a final distilled water rinse.
- 8. The screening was completed by 1:00 p.m., and Dave Guyan went back to Monitoring Well G3/EE-11 to observe the field activities. The drill crew had removed their respirators and had finished the installation of Well G3/EE-11.
- 9. The drill crew broke for lunch at 2:00 p.m. They steam cleaned the augers and other field equipment.
- 10. After the lunch break, the crew began drilling Monitoring Well G4/EE-106 (see Attachment A). The same procedure used on Well G3/EE-11 was followed.
- 11. The drilling was completed by 4:30 p.m. The stainless steel screen was placed from 18.0' to 23.0' and stainless steel risers were placed to 3' above the ground surface. One section (5') of auger was removed and the rest was left in the bore hole. The drill crew quit work for the day.
- 12. Dave Guyan returned to the E&E field office to observe the sample handling procedures. Ron Bock said that a composite sample covering the 10' to 20' depth of Well G3/EE-11 will be sent for analysis. He had Cerro's split sample prepared and explained the procedure and numbering system. Custody seals were placed over the lids of all jars.
- 13. Dan Sewall returns to the E&E office and explained that E&E will be sending samples to their lab on Wednesdays and Fridays. He asks if this would be acceptable to Cerro.

- 14. Dave Guyan called Larry Oliver to inform him of E&E's sample shipping schedule. Larry noted that Cerro will use the same schedule so that all samples could be kept together and no break in the chain-of-custody would occur.
- 15. Cerro's samples and E&E's samples were placed on ice in a cooler and a custody seal was placed on the cooler. The cooler was left in the field office overnite.
- 16. Dave Guyan departed the E&E field office at 5:00 p.m. and returned to the Sverdrup office.
- 17. Dave Guyan took 31 pictures of the field and office work.

Attachments (1)

David W. Gaymoration
Sverdrup Corporation



Eugene J. Daily, Chairman
John P. Higgins, President
Otis E. Michels, Vice President
James F. Dallmeyer
Laboratory Director

February 2, 1987

Sverdrup Corporation 801 N. Eleventh St. Louis, MO 63101 FEB 04 1987

SVERDRUP CORPORATION

ENVIRONMENTAL DIV.

Attn: Mr. Larry Oliver

Re: Project 10224A/400001

Dear Larry:

In your above referenced letter, you asked me to confirm our fees for our laboratory services. These fees were originally quoted to you by Mr. Steve Zajicek, of our office.

Our fees, quoted August 1, 1986, are summarized on the attached sheets. They are predicated on a full, IEPA protocol data package, and a 60 day turn-around time.

I understand that you expect to be submitting approximately 10 samples over a two week period. We intend to hold these samples until the sampling is complete and analyze them as one set. This will minimize the additional quality control samples which must be prepared. An exception to this will be the VOA analyses, which must be performed within 14 days of sampling. They will be grouped together to the maximum extent possible, consistent with this holding time. Sverdrup Corporation is not to be charged for the first spike analysis nor the first two duplicate analyses. Similarly, the first Matrix Spike/Matrix Spike Duplicate (MS/MSD) for Base-Neutral, Acid, and Pesticide fraction will not be charged. For the VOA analyses, Sverdrup will not be charged for the first two sets of MS/MSD's.

As we discussed, our standard fees do include the cost of sample bottles. Since Cerro Copper is purchasing bottles from the Illinois EPA, you asked me to consider discounting our fees to reflect this savings. The cost of our bottles is considered part of our overhead. For this reason, I am not in a good position to extend this savings on to you. To balance this out, we are absorbing the cost of the Quality Control samples, I described above. These are normally treated as additional samples, and are billed directly. This represents a substantial savings to your client. I think that Cerro Copper should find this arrangement more than equitable.

Sverdrup Corporation February 2, 1987 Page - 2 -

Thank you for allowing us to be of service to you. If you should have any questions or if we may be of any further assistance to you please call us.

Very gruly yours,

James F. Dallmeyer Laboratory Director

JFD/ark

enc.



Eugene J Daily, Chairman John P Higgins, President Otis E. Michels, Vice President James F. Dallmeyer Laboratory Director

Proposed Fee Schedule

for

Sverdrup Corp.

Soil Samples

CERCLA list Metals

Aluminum Antimony Arsenic Barium Beryllium Cadmium Chromium Cobalt Copper Iron Lead Manganese Mercury Nickel Selenium Silver Thallium Vanadium Zinc

√ 19 Elements

Additional Metals

Calcium	•	11.00
Mercury		11.00
Sodium		11.00
Potassium		11.00
Sample Preparation	flame/plasma	16.00
•	Graphite Furnace	16.00

242.00

Proposed Fee Schedule February 2, 1987 Page - 2 -

Inorganic Parameters

	Nitrate	15.00
	Chloride	10.00
/	Boron	18.00
	Sulfate	15.00
	Nitrogen, Ammonia	18.00
	Total Nitrogen Kjeldahl	20.00
	EP Toxicity, Extraction	50.00
	Phenols, Recoverable	50.00
/	Cyanide	30.00
	Sulfide	25.00

Organic Parameters

√ Pesticides/PCB's	225.00
√ Volatiles, VOA's	300.00
√ Acids	300.00
√ Base-Neutrals	300.00

TOTAL \$ 1415 / SAMPLE